

NEWES
OF THE COM-
PLEMENT OF THE ART
OF NAVIGATION.

AND OF THE MIGHTIE
Empire of *Cataia*.

TOGETHER WITH THE
Straits of *Anian*.

By A. LINTON

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TO ALL AND SINGVLER THE SVB-

JECTS OF THE MOST
HIGH AND MIGHTIE PRINCE,

JAMES by the grace of God, King of Great Brit-
taine, France and Ireland, defender of the Faith, &c.
being *Mathematicians, Merchants, Navigators, Travel-*

lers, &c. And also to all other, furtherers and fauourers of

Geographie, Nauigation, and Discoveries; and to

euerie of them, respectiuely; ANTHONIE

LYNTON Parson of Worth, in the Coun-

tie of Suffex, wisheth health, and all
true happinesse.



ALL dutiful offices vnto you,
and euery one of you, with
due respect, and fashion an-
swerable, premised and per-
formed, &c. When I consi-
dered, with what great con-
tentment you reade the Re-
ports of *Iapon, and China,*
contained in the yearly letters and missiues of the
Iesuite Friers, (folke of other nations, and inha-
biting in remote countries, and of a sect corrupt in
religion, which produceth, as the Prophet *David*

speakeeth, Psal. 144. 12. *Strange children, whose mouth talketh of vanitie, and their right hand is a right hand of iniquitie*: as well witnesseth our owne late fearefull experience in their powder treason, and the ruine of many noble Personages, and families, in this westerne world, by their meanes.) It gaue me occasion to assure my selfe, that you will with no lesse content, reade, and consider also these newes, written by an English man borne, a Minister of the Gospell, and dwelling amongst you: Newes, I say, of things verie strange, pleasant and profitable, both to your priuate selues, and also to the publike State, and such as many yeeres past haue been greatly desired, & yet neuer vnto this day knowne, nor scant hoped for: comprized in two principall heads. The former whereof is of the complement of the Art of Nauigation. The other is of the great and mightie Empire of *Cataia*, &c.

I Nauigation (as you know better then I can report) is an art more excellent and eminent, then any other of the like kind in vse and practise amongst vs; whether you consider the dignitie, the necessitie, or the vtilitie thereof.

The dignitie of Nauigation will most evidently appeare, if you consider from whence it taketh his originall, namely, from Arithmetique, Geometrie, & Astronomie, the three most glorious of the seuen Liberall Sciences, which three ancientlie and truly were called *Acroamatica*, and were the studies of Kings & greatest Princes. All which said three Liberall Sciences must necessarily concur, both in the making vp, & also in the practise of

of Navigation, so as no one of them can bee missing in any case: which happeneth in no other practique science or discipline whatsoever in vse amongst vs; and therefore Navigation (as a glorious Queene, attended vpon by many honorable Ladies) is of great dignitie, as wel for the offspring, as also for the practise of the same.

The necessitie thereof is most apparent: for without it the nations of the world dwelling farre asunder, neither should nor could euer at any hand by traffique or commerce be partakers of others commodities, manners, learning, policies or religion; without which how miserable mankind should be, or haue been, your wisdomes can easilie conceiue, and specially the *Insulani*, which without this Art should dwell alone sauage, and barbarous, and in great want of things needfull both for their bodies and soules; and should also want all means to vent their owne excellent commodities, to the vse & benefit of others. Nay many goodly and great Ilands of the world as well as small, should not to this day haue been replenished with people, but haue remained void and desolate, as doe *S. Hellens*, and the Hollanders *Mauricius*, and others, and mankind thereby haue been diminished; and Gods glorie left without witnesses in those places.

Navigation doth likewise lively shew it selfe vnto the least view or consideration of the wise, to be a science and practise of singular profit; seeing that without it the life of man can hardly be preserved. For there is no Countrie, no Prouince, no

Citie euerie way sufficient, well to sustaine it selfe, but euery one of them hath need of others helpe and succour. All which for the most part be supplied by Nauigation, and without it, cannot well and commodiously be had. Yea, and the Philosopher is of mind: That it behooueth cities and kingdomes to haue shipping in store, and in readinesse for Nauigation, if they meane to enioy their liberties, and to rule ouer others. For clearing of all which, let these few examples heere recited, serue in the stead of many arguments.

Of the Kingdome of *Israel* vnder *Salomon*, it is thus written, 1. King. 10. 22. For the King had on the sea a Nauie of *Tharsis*, with the Nauie of *Hiram*: once in three yeeres came the Nauie of *Tharsis*, and brought gold and siluer, and Iuorie, and Apes, and Peacocks..

It seemeth that this Nauie of *Tharsis* (of great ships for the sea, as one interpreteth it) was only for the trade to the Isles of *Cittim*, in the *Peloponnesian* sea, and other townes vpon the coasts and Ilands of the *Mare Mediterraneum*.

For of the shippes of the red sea, that went to *Ophir* for gold, the Scripture speaketh otherwise, 1. King. 9. 26. viz. Also King *Salomon* made a Nauie of ships in *Asiongabar*, which is besides *Eloth*, and the brinck of the red sea in the land of *Edom*. 27. And *Hiram* sent with the Nauie his seruants that were mariners, and had knowledge of the sea, with the seruants of *Salomon*. 28. And they came to *Ophir*, and for from thence foure hundred and twentie Talents of gold, and brought it to
King

King *Salomon*. The effect of these Nauies you may reade, 1. King. 10. 23. And so King *Salomon* exceeded all the Kings of the earth, both in riches and wisdom. vers. 26. Then *Salomon* gathered together Chariots and horse-men: and he had a thousand and foure hundred chariots, & twelue thousand horse-men, whom he placed in the Chariot-cities, and with the King at *Ierusalem*. vers. 27. And the King gaue siluer in *Ierusalem* as stones, & gaue Cedars as the wild fig-trees, which grow abundantly vpon the plaine, &c.

Tyrus also flourished exceedingly by Navigation: it is euident in that the prophane Authors do attribute the inuention of ships and sayling vnto that nation, I meane the *Phanicians*, citizens of *Tyrus*, and other sea townes adioyning thereunto, as witnesseth *Tibullus*, *Eleg. 7.* as he is cited by *Polydor Virgil*, *De rerum inuent. lib. 3. cap. 15.*

Vt maris vastum prospectet turribus Aequor.

Prima ratem ventis credere docta Tyros.

The holy Scriptures also are euident records hereof. *Esay* the Prophet speaketh thus, chap. 23. 8. Who hath decreed this against *Tyrus* (that crowneth men) whose merchants are Princes, whose chapmen are the Nobles of the world. And *Ezechiel* chap. 27. 3. declareth the glorious estate thereof. And vers. 25. The shippes of *Tharsus* were the chiefe in thy Merchandize, and thou wast replenished and made verie glorious in the midst of the sea. vers. 27. Thy riches, thy faires, thy merchandize, thy Mariners and Pilots, thy Calkers, and the occupiers of thy Merchandize, and all the men

men of warre that are in thee, shall fall in the midst of the sea, in the day of thy ruine.

Call to remembrance that old *Carthage* also, a renowned offspring of *Tyrus*, which only by Navigation and trading by sea, grew so mightie, that three severall times it tooke occasion to stand out with Rome for the Soueraigntie, in three severall warres, great, doubtfull, and lamentable. In the first of which, it is reported, that the Carthaginians were beaten in a battell at the sea, & so brought in order. In the second warre, which happened some fortie yeeres after, they were growne againe so strong, that besides many battels by land, euen in *Italie* fiftene yeares together, they fought with the Romans a great battell by sea; in which likewise they had the worst, as witnesseth *Tit. Liu. Dec. 3. lib. 2.* and at length being enforced by the Romans to yeeld, their citie had been vtterly rased to the ground, had they not redeemed the same with teares, and a yeerelie tribute of two hundred *Euboian* talents; and withall concluded with the Romans, neuer after to haue and keepe moe ships for warre, then ten, &c. as writeth *Appion* in *Lybico*. Yet neuerthelesse the Carthaginians, within fiftie yeeres after that, grew againe so exceeding mightie by sea and land, that they vnder-tooke a third warre against the Romans, in which they were overcome by sea and by land, and their noble Citie, which had stood seuen hundred yeeres in great strength, was rased vnto the ground: that Nation, which was at the first the most powerful, was also at the last the occasion

sion of their ruine, being ouermastred by the Romans in strength at sea, as well witnesse the speeches of *Hanno*, and *Cato Censorinus*, in *Appion. de bello Lybico*; whereby may be seene the great vtilitie of Navigation.

Consider also the Cities of *Greece*, as *Athens*, *Corinth*, and the residue vpon the sea coast; yea, and the very small Islands of the *Aegæan* sea; as *Samos* and such like: how much they encreased in renowne and riches by their shipping and Navigation, and the vtilitie thereof will plainelie appeare. That I say nothing of the Greeke and Roman Empires, in whom their *Navalia* are not the least memorable in ancient stories.

Neither may I here forget the sea forces, and sea seruices of the now flourishing and menacing Empire of the Turks, which are not vnknowne to the world: Reade *M. Hakluyte* (who hath excellentlie well deserued of our whole Nation, in his worthie works of our English Voiages.) vol. 2. part. 2. pag. 78. where you shall find specified 268. vessels for ſ war that besieged the *Rhodes*: besides the Nauie that lay attending in other places to cut off all succours of Christians, &c. and elsewhere in those his volumes.

Consider further the Venetians, and the Genowaies, how by Navigation they haue supported, and increased their great Estates.

Then turne your eies vpon *Spaine*, *Portugall*, and *Holland* now of late yeeres, how as they haue been better furnished with shipping, so haue they

had their riches, honours, and Estates increased euen to wonderment.

Looke ouer the world, vnto the great Empire of *China*, which at this present doth abound with shipping, both for the Inland seas and riuers, to trade at home amongst themselues with easinesse and speede; and also for the vaste Ocean, for trading with forraine nations; whereby infinite numbers of that people are set a worke, and their riches and renowne is growne vnto the world, verie admirable, as witnesseth Master *Hackluit* in his workes of our English Voiages, vol. 2. par. 2. pag. 77.92. and vol. 3. pag. 837. 858. Reade also *Arthus de India orientali*. pag. 466. 468. Also reade *Pantogia*. pag. 56. 61. 64. 65. 112. &c.

Lasly, let vs returne home vnto our owne Countrie, this Realme of England, and we shall find the estate thereof much encreased, and supported by Nauigation. By Nauigation we reade that *Edgar*, (that I may vse his owne words in his stile) *Anglorum Basileus, omniumque Regum, Insularum, Oceanique Britannia circumiacentis; cunctarumque nationum, qua infra eam includuntur, Imperator, & Dominus*; who raigned anno dom. 959. kept his seas from Piracy, and his land from forraine inuasions. For eueeryeere he rigged 4000. saile of shippes, and diuiding them into foure companies, put them to sea, vpon the foure quarters of his kingdome, for the same purpose. By Nauigation, our Armies haue been transported into other lands for seruice there: So *Iohn* King of *England*, with a Nauie of 500. ships, transported his

his Armie into *Ireland*, ann 1206. So our Armie and forces were transported by Sir *Francis Drake* Knight, vnto *S. Domingo*, and *Carthagen*, in the *West Indies*, anno 1585. and into *Portugale*, anno 1589. By Nauigation many strong battels haue been fought at sea by our nation, and honorable victories obtained: as the battell at *Sluce*, by King *Edward* the third, anno 1340. the *French* Fleet being of 400. saile. As also the battell fought at *Hareflew* in *France*, by King *Henrie* the fifth, against the *French* Nauie of 500. ships, anno 1414. As was also that most renowmed victorie gotten, from and of that vaunted inuincible *Spanish Armada*, anno 1588. And that ouer the Nauie Royall of the King of *Spaine*, gotten in the Bay of *Cadiz*, anno. 1596. By Nauigation, the *Spanish* Fleet, that came to waite ouer King *Philip* from *Douer* into the *Low-countries*, anno 1556. was compelled by a few ships of the Nauie Royall of this Land, vnder the conduct of the Right Honorable, the Lord *William Howard*, Baron of *Effingham*, then Lord high Admirall of *England*, (and father to the now Right Honorable, and renowmed Lord *Charles Howard*, Earle of *Nottingham*, and Lord high Admirall also of *England*,) to strike their sailes, and vaile their bonnets, and performe such honorable acknowledgements, as were done at sea, to the Emperiall Crowne of this Land. The like also was done by ten ships of the Nauie Royall of our late Queene *Elizabeth* of famous memorie, vnder the conduct of the aforesaid *Charles Howard*, now the Right Honorable Earle of *Nottingham*, Lord high Ad-

mirall of *England*, vnto the great *Spanish* Fleet of 130. ships, conducting the Emperours Sister, the spouse of *Spaine*, thorow the narrow Seas, into *Spaine*; vnder whose worthie, and happie conduct also, the two honorable victories ouer the *Spanish Armadaes*, last before mentioned, were obtained, to his immortall fame and glorie. By Nauigation, the Northerne seas vnto *Rusland*, and *Mosconia*, were happily discouered, anno 1553. and a happie trade of Merchandize opened thither, which continueth vnto this day. By Nauigation, the East and West *Indies* haue bin sailed vnto, by our *English* nation; the bottome of the *Mediterranean* seas searched, and the great Emperour of the *Turkes* at his *Seragno*, or Port in *Constantinople*, Royally saluted, to his great content; since which time, neither he, nor his Successors, haue been so forward as before, to make warre vpon the Christians: Yea and by Nauigation, the huge conuexitie of the whole world, within little more then these 30. yeares last past, hath been by our *English* nation twice sailed about. Once, by the worthie Sir *Francis Drake* Knight, and the second time, by the worthie *Thomas Candish* Esquire, both passing thorow the Straits of *Magellan*, into the South sea, and so coasting from thence the Westerne shore of the New world, vnto *California*, passed from thence vnto the *Moluccan* Ilands, and from thence by *Iana*, and by the Cape, *De bona Esperanza*, and returned againe aliue into this Realme of *England*, with riches and renowne. A voyage neuer yet before this day performed (for any thing I know
to

to the contrarie) by any other, of what nation soeuer, but only by *Magellan* the *Portugale*, who first found his so called Straits, *anno 1520.* as *Arthus* reporteth, pag. 411. but perished himselfe before he returned againe into *Spaine*. So that whatsoever may be said of the increase of our wealth, and riches, I cannot tell, but this I am sure of, that our Estate (through the goodnesse and protection of the Almighty, to whom be all praise and honor for the same for evermore,) hath been mightily defended, and secured by our Navigation, in such sort, that as in former times, so now at this present day, our glorie and honor shineth with great brightnes, in the midst of the mightie Empires, and great Kingdomes of *Europe*. Neither haue the ancient Kings of this Land neglected the acknowledgement thereof. But as in ancient times, the Kings of the *Latins* stamped a ship vpon their money, in remembrance of the great benefits that their Land had receiued of *Saturnus*, which from the sea had arriued amongst them, as witnesseth *Ouid, Fast. lib. 1.* in these words:

*At bona posteritas puppim formauit in are,
Hospitis aduentum testificata Dei.*

Euen so, the ancient renowned Kings of this Land, coyned their gold, on the one side with a ship vpon the sea, testifying thereby, the great commodities that came ynto their Land by Navigation.

All which examples rightly and duely considered, do liuely manifest the great vtilitie of Navigation.

So that we may conclude, that Nauigation is the most excellent Art of all others of like practise, both for the dignitie, necessitie, and vtilitie thereof.

And yet neuerthelesse this most excellent Art, by which so much good commeth, and so many excellent and memorable things haue been, and are daily performed, is yet very imperfect, standing vpon no warrantable and sufficient grounds and rules whereby it may be duly practised. As witnesseth Sir *Humfrey Gilbert* Knight, who saith of himselfe in these words, *viz.* I haue deuised to amend the errors of vsuall sea Chards, whose common fault is to make the degrees of Longitude in euery Latitude of one like bignesse. And haue also deuised therein a sphericall Instrument, with a Compasse of variation, for the perfect knowing of the Longitude. And a precise order to pricke the sea Chard, &c. *Engl. viag. vol. 3. pag. 24.*

And Mr. *Thomas Digges*, that excellent Mathematician, in his Preface to the Reader, of his *Stratificos*, hath these words, *viz.* First therefore, by Demonstrations Mathematicall, finding the great imperfections in the Art of Nauigation, & grosse errors practised by the Masters and Mariners of this our age: I sought by reason to perswade with some of them, to alter and reforme their Chards, Instruments, and erroneous Rules, shewing them infallible Demonstrations of their errors. And a little after: By prooffe I found, and those masters themselves could not but confesse, that experience did

did no lesse plainly discover the errors of their Rules, then my Demonstrations.

And M^r. *William Burrowes*, sometime Controller of the Royall Naue, of our late Queene *Elizabeth* of famous memorie, in his Epistle wherein his Mappe of *Russia* was to her dedicated, hath these words, *viz*. It is so, that there are Rules vsed in Navigation, which are not perfectly true, amongst which, the straight lines in the sea Chards representing two and thirtie points of the Compasse or winds, are not holden to be the least: &c. but noted of such talkers for principall, to condemne the occupiers thereof for ignorant, &c.

And M^r. *Richard Polter*, one of the late foure principall masters of his Maiesties Naue Royall, in his booke called the path-way to perfect sailing, printed at *London*, anno 1605. deliuereth a great number of absurdities, in the said Art of Navigation.

And M^r. *Edward Wright*, a verie learned Mathematician, hath (not long since) published a booke likewise of the errors in the Art of Navigation; which booke I haue seene, but neuer read the same, &c.

So that this noble Art of Navigation, although it be so excellent, is yet neuerthelesse imperfect, and founded vpon no sufficient Rules of Art, whereby it may be generally practised as it ought.

And although it may be obiected, that not only Sir *Humfrey Gilbert*, and *Richard Polter*, & other, haue attempted the reformations of these imperfections, but also that M. *Edw. Wright* hath lately perfected

perfected the same, so that all errors and absurdities are by him reformed. I answered & freely confesse, that the said *M. Wright* hath exceedingly well deserved of Nauigation, and specially in that projection of the sea Mappe by him deuised, (according to which, the Mappe commonly annexed to the volumes of our English Discoueries, and the great quarter Maps published at *Amsterdam* by *Iodocus Hondius*, anno 1602. are framed): but yet I am assured, that his reformation will be found to fall far short of perfection, when his trauels shall come to strict examination, not because he wanteth either learning, or diligence therein, but a good foundation whereon to raise his worke, that is, the knowledge of the magnetical poles hereafter mentioned: so that the said Art, although it be by his industrie and trauels very much amended, yet is it far from being perfected.

This excellent and profitable Art of Nauigation (but very vnperfect, for any thing that is yet publicly knowne to the contrarie) I presume I haue by the great blessing of Almighty God in Christ Iesus our Sauour, not without exceeding paines and labours in and about the same, brought to very good perfection, and furnished it with all the Complements therof, and am able at this present, by his grace, to enforme any of you (of competent knowledge and capacity for the same) how he may practise the same, with as great facility, and expedition, as now is done, and with so great certaintie make his conclusions, of Latitude, Longitude, and variation, as is possible to be done in any other

other Mathematicall practise, in vse amongst vs, depending vpon continued obseruation. And this is the first end and maine purpose of all my labours taken in and about my mentioned Complement.

And for as much, as many learned men heretofore, haue professed thus much, with many other things touching this Art, all which for the most part, are vanished away like smoke, and quite gone as though they had neuer been: by reason whereof, you may easily be induced, to hope for no better successe at my hands, of these my promised Complements. I haue therefore thought good, for your better satisfaction and contentment, to set downe in order, some few of the chiefeest heads in these my trauels, proposed and concluded, together with some Corrolaries from them deduced, as followeth, &c.

I

That (although a great learned man and his followers, absolutely denie that there is any fixed pole magneticall, yet neuerthelesse) there are two fixed poles magneticall, which are the maine grounds of the Art of Nauigation, and without which the said Art cannot be well and sufficiently practised: the one Arctique, because it is within the Arctique circle, the other Antarctique, for the like reason; much different from the poles of the world, and also from all and euerie the fancied magneticall poles heretofore published.

2

That these magnetical poles are vpon the superficies of the Globe of the earth, and haue a magne-

ticall axis, passing betweene them thorow the Centre of the said earth.

3

What is the Longitude of either of the said magneticall poles, from the ancient first meridian of the world, passing by the *Canarie* Ilands, or the meridian of any other place, whose Longitude from the said first meridian is knowne. And also what Latitude either of the said magneticall poles hath from the Equinoctiall.

4

That vpon these poles magneticall, as vpon their Centres, are to be conceiued and described (for the Art of Nauigation) vpon the superficies of the Globe of the earth, an *Aequator*, parallels, and meridians magneticall, much differing from those of the world.

5

That there is one common meridian or great circle, passing thorow both the poles magneticall, and poles of the world, diuiding the superficies of the earth, into two seuerall Hemispheres.

6

That in this common meridian, is the beginning of Longitude, to be accounted in the Art of Nauigation.

7

What is the difference of Longitude of this said common meridian, either Eastwards, or Westwards from the meridian of the *Canaries*, or from any other place, whose longitude from the said Ilands is knowne.

That

8
That the North and South of the Compasse varie for the most part from the North and South of the world, the greatest variation being of 180. degrees, which lessened vntill it come to nothing.

9
That in euery parallel of the world, and in equal spaces in euery of them, this variation altereth, in some places encreasing, in some places decreasing, and in some places directing it selfe to the pole of the world; In some places of equall space, it altereth swifter, and in some places it altereth slower; in some places it varieth to the Eastwards, and in some places to the Westwards, as is alreadie well knowne. And now all these places are giuen and knowne, where they be in euerie of the said parallels, and also the causes thereof.

10
That in euery parallel of the world, betweene the Equinoctiall and the poles magneticall, as also in the said Equinoctiall, there be many seuerall places wherein the Compasse hath equall variations.

11
That the said places of equal variation in euery of the said parallels, be not equally distant from the common meridian, but vnequally; and the difference of this said inequality, is more, or lesse, in different parallels.

12
That the longitude of all and euery the said places of equal variation, may easily be found out,

and described vpon the Globe and Chard with helique or tortuous lines, some of them tending from the Arctique pole of the world, vnto the Antartique pole magnetical: and contrariwise, some of them tending from the Antartique pole of the world, to the Arctique pole magneticall, crossing as well the Equinoctiall and Equator magneticall, as also almost all the parallels of both kinds.

13

That all the Rumbs described or supposed to be described by a ship sailing vpon the sea, except the meridians and parallels, be spirall lines, passing from the equinoctiall to the poles magnetical, and not to the poles of the world, as hath been hitherto falsely supposed.

14

That all the said spirall lines or Rumbs may be described vpon the Globe for Nauigation, and also vpon the sea Chards in *plano*, as well those after M. *Edw. Wright* his proiection, as vpon others of two other proiections, not heretofore vsed in Nauigation, yet beautifull to the eye, and conuenient for the practise of the said Art of Nauigation.

15

That the Globes, and one sort of sea Chards may be made, without any Rumbs described vpon them, and yet serue as well and as readilie to all purposes for the vse of Nauigation, as those Globes and Chards may do, that haue the Rumbs or sailing lines described vpon them.

16

That the Globes and Chards thus described, do
giue

give the longitudes and differences of longitudes of and betweene verie many places, and also the trendings of diuers coasts somewhat otherwise then the ordinarie Globes and Mappes doe offer them; yet neuerthelesse trulie and as they bee indeed.

17

These Globes and Chards thus described; to find out by obseruation, as well at sea as at land, the magnitude of the variation of the Compasse for the place where such obseruation shall bee made, readily, and iustly, the Latitude of the place being first knowne, &c.

18

The variation of the Compasse and the Latitude of the place being giuen, to find out by Arithmetically calculation the true Longitude of the same place.

19

Contrariwise the Latitude and Longitude of any place being giuen, to find out thereby the true variation in or at that place, and that also by Arithmetically calculation.

20

Foure diuers other waies and meanes to find out at all times the Longitude of the place wherein you make obseruation, (or to pricke the Chard as it is commonly called) with as much ease and expedition, and with farre more certentie then now is or can be vsed in our moderne Nauigation.

21

A fift way, the height of the pole of the world being

C 3

being

being giuen, &c. to find out at all times the Longitude most certenlie without any regard had to the Rumbe wherein you haue sailed, or the number of leagues you haue run, or the variation of the Compasse: by Arithmeticall calculation.

22

A sixt way, the height of the pole being giuen, &c. without any regard of the things last before mentioned, to performe the same by mechanickall practise speedily.

But here it is to be vnderstood, that as euery one of these seuerall waies before mentioned of finding the Longitude is warrantable true, if the things required in them (*vz.* variations and eleuations, and other things to be found by obseruation) be true; so likewise if the said things required, be faultie; that then the longitudes also from them deriued will bee answerable faultie in their proportions.

And secondly, that seeing Nauigation standeth wholly vpon obseruation, and all obseruations for the same at sea, be made by very small instruments, as namely the sailing Compasse, Astrolabe, and such like, so that the variations and eleuations and such like, found by such obseruations, be seldome true; and that therefore true longitudes are seldome to be found; yet neuerthelesse howsoever it fall out it is certaine.

23

That by these seuerall waies assisting each other in the hand of a Nauigator, the longitudes may be found sufficiently true for the precise practise of Nauigation

Nauigation, according as I haue proposed. And because the mysterie of finding the longitudes according to these proiects depēdeth vpon the magnetical poles, (for the finding out of which poles, I haue been enforced, to vse the obseruations of other men, wherein, if they haue failed, and I my selfe also haue donē the like, in relying vpon them,) it may come to passe, that the longitudes cannot be by these my poles found out so exactly as is to be wished for, before such time as the places of the said poles be first, yet more truelie, found. Therefore if it shall happen to appeare, that the places of the said poles, by me found out, be yet defectiue (which defect neuerthelesse I am well assured will bee very little); I haue deuised a way,

24

How any man hauing some knowledge and practise in the Mathematics, may by his owne obseruations exactly find out the true longitude and latitude of the said poles, (farre easier and with greater speed then I haue done, or could doe, before I had found the same another way,) and may also fit the same most commodiously, vnto the Art of Nauigation, and it vnto them as I haue done.

25

How (besides this Globe and Chard) all other the instruments commonlie vsed in the Art of Nauigation, as the Compasse, the Astrolabe, the Quadrant, the Crosse-staffe, & the Trauers boord, may be excellentlie well amended and perfected.

And

26

And besides these mentioned premises, many other propositions and conclusions do occur in this my Complement, both strange and profitable; of which in this place I may not speake.

The other part of these my Newes comprehendeth amongst diuers other, these things following, *viz.*

¹
The great Empire of *Cataia*, where it lieth, and the great riches of the same.

²
The way by land from the confines of the *Caspian* sea, vnto the same.

³
A new Geographicall description of the *Caspian* sea, and of the Easterne and Northerne *Tartaria*, and of the Empire of *Cataia*, as it now lieth, far differing from the vsuall descriptions now extant amongst vs, with the longitudes and latitudes of *Cambalu*, and *Quinsay*, &c.

⁴
That the *Tartarian* Empire vnder the great *Tamerlane*, far surpassed in greatnesse any of the Empires that euer haue been, or be, or are likely to be in ages to come.

⁵
That there is greater hope then euer was heretofore, of a free and safe passage by sea, Northerly from *Europe* to *Cataia*.

⁶
That I haue added the longitude of 50. or 60. degrees of good discouerie, vnto the alreadie knowne

knowne longitude, comprehended betweene the
 Westernne coast of *America*, vnder the latitude of
 67. degrees, on the one side, and the *Vaygatz*, or
 Ile *Van Oranges*, vpon the North of *Noua Zemla*,
 on the other side; but how and where the same is
 added, shall be said elsewhere. And if two seuerall
 obseruations, made by two seuerall Navigators,
 of as great knowledge and iudgement in their Art
 and facultie, as any other of our age, had bin true;
 (as in all likelihood they seemed to me to be, and
 will so seeme also to other men, vntill they be dis-
 proued) I might with the safety of my credit, haue
 affirmed, that I had fully discovered that passage.

7

That the residue of that passage yet vndiscou-
 red, is lesse by much, then it hath been thought to
 be.

8

The straits of *Anian* where they be; and of what
 largenesse.

9

The fittest and most commodious way to be at-
 tempted, for the discovery of the said passage.

10

That there is no doubt, but our nation may be
 entertained into a very rich trade of Merchandize,
 with the *Cataians*, &c.

These be some part of these my Newes, so long
 hidden from the world, and so greatly desired of
 our nation, but with little hope: for the reuealing
 whereof, (as I trust) it hath pleased our most gra-
 cious God, to make me (his most vnworthy ser-

D

uant)

vant) his instrument. And these benefits will ensue thereof, viz.

1 That the Art of Navigation may in short time, be brought vnto the highest perfection, so,

2 That not only the feare conceined in the Regiment of the sea, printed at London, anno 1606. pag. 73. that they are likely to perish, which happen to fall vnder the North-pole of the world, (and by like reason vnder the pole magneticall,) vnlesse they be holpen by a clock, made and rectified before hand for that purpose, is cleerely taken away, and remoued. But also,

3 That our Voyages and Discoveries, may be performed with more certaintie and readines, & therefore with greater gaine, and with lesse losse of liues and goods, then vsually hath been.

4

That the Art of Navigation requireth professors of greater skill and practise in the Mathematicals, then are now commonly to be found among them; in which notwithstanding they may easily, and in short time, attaine a good sufficiencie for their profession.

5

6 That the discoverie of *Cataia* by any supposed Northerne Passage, further then hath bin alreadie discovered, cannot be safely and commodiously attempted, much lesse performed, without the knowledge of this my Complement, and Navigators

gators of very good skill and practise in the Mathematics,

6
That this Complement taketh nothing away from the ordinary practise of Navigation, nor altereth any thing in the same, save only it addeth a Globe of a new description, and a Map or two, after M. *Wrights* mentioned Projection, rectified, and one other sea Map or two, of other Projections; & some other few Instruments, with the uses of the. In the residue, men are left to their own ordinary proceedings, although they may amend, or alter all, if they please, which verily is requisite.

7
That diuers opinions and doctrines of diuers learned men (whom for honors sake I will not heere name) are hereby cleared, or confuted.

8
That the worlds general Geographie may be hereby very much amended, & may in short time be brought to the highest degree of perfection: so that the studious of that Art, and of the Apodemiques of the ancient, meane, and moderne ages, may receiue thereby great light and contentment.

9
The benefits of planting the Gospell amongst those *Ethnique* and Idolatrous nations of *Cataia*, and others by the way; the setting of our people a worke, the increase of Navigators and men of seruice for other employments, the bringing in of great Treasures into this Land, the turning of the trade of the Esterne world, which the great

Turke on the one side, and the *Spaniard* and *Portugale* on the other side, haue now gotten almost all into their owne hands, besides many other accidentary benefits, I leaue to your wises consideration.

Gods mercy, in reuealing this Complement vnto me, I for my part, account a blessing so rare and precious, (not so much for the strangenes and difficultie therof, as for the generall and continuall vse and benefit thereof vnto mankind,) that if *Archimedes* in his daies had gotten it, he would haue runne once againe out of his bathing tubbe, with his ioyful crie, I haue found, I haue found. If *Thales Milesius* had attained it, he would haue offered one oxe for a sacrifice of thankfulness, as he is reported to haue done, for the finding out of the 2. 3. 4. 5. Propos. of the fourth booke of *Euclid*. If *Pythagoras* had found it, he would haue offered an *Hecatomben*, or a sacrifice of an hundred oxen, as it is said he did, for the finding of the 47. and 48. Propos. of the first booke of *Euclid*. How can I then, (far inferiour vnto the meanest of them in natures endowments, and humane learning,) chuse (vnlesse I should proue most vnthankfull vnto God,) but offer vnto his Maiestie an *Hecatomben* of the calues of my lips, and say with the Prophet *Dauid*, Psal. 34. 1. *Benedicam Dominum in omni tempore, semper laus eius in ore meo*: and Psal. 71. 19. *Benedictum nomen Maieſtatis ſue in eternum*.

And sith our good God hath bestowed his blessing vpon me, not for mine owne sake alone, but also for the benefit of his Church; fitting it is therefore,

fore, that I should employ the same vnto that end. I am willing in his name, and in his feare to do it, and to impart the first fruits thereof vnto you, for the honor and benefit of the Kings Maiestie, and his Subiects of this his Imperiall Monarchie of Great Britaine, for whom it hath been long time reserued. *Engl. Voiag. vol. 3. pag. 144.*

And to this end I offer and tender vnto you, and euery one of you, my selfe and my seruice, vpon meete and reasonable conditions; so that if you misse thereof, the fault shall be your owne, and not mine.

And this I protest vnto you, in holines and sinceritie, that I verily belecue, that if you misse of the same at my hands, being now growen into yeeres and hastening vnto my graue, that neither this age present, nor ages to come, are likely to haue the same. For as by conference with other men, I haue gotten nothing that hath furthered me in these my trauels; but haue relied my selfe wholly vpon mine owne collections, gathered out of such few printed books, as I could get: for histories and the reports of Trauellers, are the treasure of these Mysteries; as saith *Ptol.* in his *Geogr. lib. 1. c. 2.* (sauiug that the Worshipfull *Iohn Wood*, Doctor of Diuinitie, and Parson of *S. Dionis Backchurch* in *London*, a Gentleman exceeding willing to further our Countries good, and my very kind friend, whom I once entreated to procure me, from his acquaintance, that haue trauelled to the *East Indies*, and other places, some certaine obseruations, (which yet hitherto he could not do,) hath imparted vnto

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me,

me, certaine books of the East *Indies*, out of which I haue gotten some light, touching the situation of those Easterne countries.) So likewise haue I not communicated vnto any man; any thing of these my Conclusions, which may giue light for the finding out of this my Complement, or any Northerne Passage vnto our desired *Cataia*: this Epistle only excepted. And further I am assured, that this secret lieth so inclosed and locked vp in the manifold darke retraits of natures Cabbinet, that it is plainly impossible for any wit of man, euer at any time to bring the same to light, vnlesse it shall please the only wise and all-seeing God, to blesse him extraordinarily for the same. Let the Assayes and worthie attempts, of many excellent and great learned men, some dead, some liuing, all failing of their end and purpose herein, be cleare and sufficient testimonies vnto you of the truth hereof.

I assure my selfe that these strange Newes, and such confidence in professing of the same, wil produce diuers effects in the harts and in the mouthes of many that shal reade or heare the same; vnto some few whereof, I addresse the residue of this my Epistle.

Some sicke of a Prosopoleptique affection, which in this age raigneth far and neere, will presently bee drawen (without any respect of the worke it selfe) into admiration of the Author, as a man rarely qualified, and graced with extraordinarie ornaments of learning, &c. and following their opinions of supposed singularitye, will enter
into

into a strict *inquirendum*, who is this? who may this bee? These shall receiue answere from my night neighbour the *Owle*, from the tree of her watch, in this Poem.

Sirogites quis sit? Lintonum nosce virum quem.
Quæris: Sylvanumq; patrem, Satyrosq; minaces,
Nosq; inter nemoris gentem, tristesq; Chimeras,
Lucubrat; at musis alienus & exul amicis,
Indignus Authorum, rerum cui deficit usus.
Stat genio charus, suffultus numine Divum,
Ille voluptatis gremio, ambitionis iniqua
Fastu posthabitis, instâ & de rebus habendis
Curâ; fastidium Noctis, rigidasq; labores
Excitans, animo præclara molimina voluens,
Impiger effecit proavis non cognita vestris,
In patrios usus Anglorum gentis honorem.
Atque amor in patriam tantos stimulavit in ausus.
Est igitur pietatis opus.

Some (forgetting that God for the greater advancement of his owne glorie, and encouragement of other, doth oftentimes by meane and weak instruments bring to passe his great and marvellous works) will for the meaner nesse of the Author disable the worke, and either of contempt demand with the Poet:

Quid ferat hic dignum tanto promissar hiatus?
 Or else of malice deprave it, as the Athenians did the doctrine of the blessed Apostle S. Paul, *Act. 17. 18.*

Novorum Dæmoniorum videtur esse annuntiatio

Thus

Thus was that worthie *Columbus* vsed whilest he tendred the discouerie of the West Indies (before he had yet discovered the same) as you may reade in our English voiag. vol. 3. pag. 167. In which notwithstanding hee fullie satisfied the world. And so haue I, in times past, been vsed. For a learned Gentleman demanding of me in the presence of diuers other, whether I thought it possible to find out the longitudes of places by celestiall obseruation, without the helpe of any Eclips? And I plainly answering, that I thought it possible, tooke hereupon occasion, to reprocue openly, the vanity of them that will rashlie affirme things meerely impossible, such as he said he took that to be, by the generall confession of all learned men, &c. And I now for my part, desirous to cleere my selfe from that imputation, and to giue you some hope of the certentie of this my promised Complement, will heare deliuer some reason, why I thinke so, by the demonstration of this following problem.

Problem.

Of two places giuen, either vnder the equinoctiall, or vnder any one parallel of the world, or not much different; of which two places, the longitude of one is knowne; and the longitude of the other is not knowne: by celestiall obseruation, to be made (in conuenient time, and in that place of the twaine, whose longitude is not knowne) of the Moones visible accessse, vnto the meridian of the

the same place; to find out the difference of Longitude between the said two given places, and also the longitude of the other place, at all such times, without respect of any eclips.

For the finding of these premises, you must consider that the Moone being caried about the earth, by the force of the *primum mobile*, from the meridian of any place, passeth within the space of 24. houres and some 48. minuts of an houre, little more or lesse, ouerall the meridians of the world, (which are the whole longitude of 360. degrees) before she be brought againe vnto the meridian of y same place, during which time of 24. houres, and 48. minuts *quasi*, she proceedeth forwards in her owne proper motion *secundum successum signorum*: onely the said 48. minuts *quasi*: otherwise she should be brought vnto the same meridian againe, in the space of 24. houres, as the Sun is. And hereby it is manifest that the greatest difference of longitude between any two places, is alwaies comprised within 48. minuts *quasi*, of the Moones progresse in her proper motion: the diurnall reuolation of 24. houres being alwaies wholly reiected.

This being so, I say, that only by these 48. minuts *quasi*, and a celestiaall obseruation to be made, may be found, both the difference of longitude between the two giuen places, and also the longitude of that other place, whose longitude is not knowne.

For the minutes of time which the Moone spendeth in her owne proper course, during the

time that she is carried by the violence of the hea-
uens, from the meridian of any one place, vntil
she be brought vnto the same meridian againe, be-
ing giuen: together with the minuts of time which
the Moone in her owne proper motion lost, whi-
lest she was carried from the meridian of the one
place, vnto the meridian of the other place: the
former part of the problem, viz. the difference of
longitude betweene the said two places may bee
found. *Fiat enim.*

As the whole number of minutes wherein the
Moone proceedeth in her proper motion, during
the time that she is caried, from the meridian of
that giuen place, whose longitude is knowne, vntil
she be brought thither againe, (which whole num-
ber of minutes is alwaies 48. *quasi*;) is in propor-
tion, vnto the whole longitude of 360. degrees; so
is the number of the minutes, wherein the Moone
proceedeth in her proper motion, whiles she is ca-
ried from the meridian of either of the giuen pla-
ces, (rightly applied,) to the meridian of the other
place; vnto the difference of longitude betweene
the said two giuen places.

The most conuenient time for obseruation is
in a faire calme starrie night, and especially when
the Moone shall be in, or neere either of the Tro-
piques.

The manner of proceeding in this worke is
thus:

First, in the place of obseruation, find the true
meridian line precisely, and obserue the Moone,
vntill you see her centre directly in the same meri-
dian:

dian :. And at that very moment of time, (by the height of some fixed starre, taken, or otherwise) find out the true houre and minute of the night.

Secondly, by most exact tables made, or to bee made, deliuering the true houre and minute wherein the Moone in her apparent motion commeth euery day to the meridian of that giuen place, whose longitude is knowne. Find out the number of minutes of time which the Moone accomplished, whilest she was carried from the meridian of that giuen place, vntill she come thither againe. And this number is alwaies the first in the rule of proportion; as the whole longitude of 360. degrees is alwaies the second.

Thirdly, by the same tables seeke out the houre and minute of time, wherein the moone was last, or shall be next, (respecting the time of your obseruation) in the meridian of that place whose longitude is knowne, being also the place for which the tables are or should be composed.

Fourthly, compare the houre and minutes of time found by obseruation, and the houre and minute of time found by the tables, and so shall you haue the difference of time; which is alwaies the third number in the rule of proportion; hauing therefore your three numbers, proceed according to the nature of the worke, and your quotient shall be the difference of longitude betweene the two giuen places, which was the thing first to bee found.

The latter part of the problem may thus bee found.

This difference being found, must either be added vnto the longitude of the place giuen, or subtracted from the same, or else be subtracted from the whole longitude, as the worke requireth. And so also shall be had the longitude of the second place, where the obseruation was made; which was secondlie to be found out.

Example 1. The difference of longitude betweene *London* and the *grand Bay* in *Newfoundland*, supposed to bee in the same latitude, is thus found. Vpon the 13. day of Februarie, 1607. after the old stile, the Moone (suppose) was found in her apparent motion to be in the Meridian of *London* at 11. of the clocke at night, by the tables of her daily approach to that meridian, and that shee should be there againe the next night, at 11. of the clocke and 48. minuts: The verie same night by obseruation made at the said *grand Bay*, the Moone was seene in the meridian there, at 10. of the clocke at night and 50. minuts; so that from the time, that she had been in the Meridian of *London*, vnto the time that she came vnto the Meridian of the *grand Bay*, she had proceeded forwards in her owne proper motion 9. minuts of time. Therefore by the rule of proportion; If 48. minuts of time giue 360. degrees of longitude; what shall 9. minuts of time giue? It is answered in the quotient, gr. 67. m. 30. the degrees of the difference of longitude betweene the said two places; which was first to be found.

If from this number you subtract the longitude of *London* gr. 23. m. 30. the remainder is gr. 44.
m.o.

m.o. subduct them from 360. the whole longitude, and the remainder will be 316. degrees; being the longitude of the *grand Bay*, which was secondly to be found out.

Example 2. Suppose that the Cities of *London* and *Moscow* bee in the same parallel. Now the difference of longitude betweene them, is thus found out. Vpon the 22. day of December, after the old stile, anno. 1607. the Moone in her apparent motion was found by tables in the Meridian of *London* at 2. of the clocke after midnight. And the minuts of her progresse in that whole reuolution of longitudes were 48. Also at *Moskove* that very same night she was scene, by obseruation there, at 1. of the clocke, and 52. minuts after midnight; so that she was yet to proceed in her owne proper motion 8. minutes of time, before she should come againe to the Meridian of *London*. Therefore if 48. minuts of time giue 360. degrees of longitude, what shall 8. minutes giue? It is answered, 60. which is the difference of longitude betweene the said Cities, the thing first to be found. This done, adde these 60. degrees vnto the longitude of *London*, viz. gr. 23. m. 30. the product will be gr. 83. m. 30. the longitude of *Moskove*; which was secondlie to be found.

There is no doubt but the longitudes may bee found this way, for,

First, the Meridian line may precisely bee had by obseruation. And secondly, so may the houre and minute of time, the houre being 15. degrees of a great circle, and the minute of an houre of 15.

minutes of a degree. And yet the eleuations of the pole and altitudes of the celestiall lights, are found out even vnto one of those minuts of a degree, and lesse. And therefore one minute of time, (being 15. of them) may also be found. For in an instrumēt, the semidiameter of whose Equinocti- all circle shall be .6. foote, one minute of time shall be almost one third of an inch. And the semidia- meter being three foote, one minute of time shall be one sixth part of an inch almost.

Thirdly, tables also may bee had deliuering ex- actly the houre and minute, wherein the Moone in her apparent motion, commeth euery day to the Meridian of that place, for which the tables be, or are to be made; for indeede all these three things haue in former times been had, otherwise there could haue been at this day no theoriques of the planets or tables of the celestiall motions a- mongst vs.

This way also of finding the longitude is suffici- ent good, and may come often into practise, be- cause the proportion of 48. minuts of time or thereabouts (which make some 12. degrees and 30. minuts *quasi*, of a great circle) is sufficientlie great to the whole longitude of 360. degrees. For if 48. minuts of time, giue 360. degrees of longi- tude, then shall 24. giue 180. degrees, and 12. shall giue 90. degrees, and 6. shall giue 45. degrees. and 3. shall giue 22.5 degrees and an halfe. And 1. minute shall giue 7.5 degrees and an halfe, &c. And the difference of longitude in any one parallel that shall bee lesse then 7.5 degrees and an halfe, may

may otherwise bee found out, these former being first had.

Moreouer, it is certaine that in places of diuers latitudes, yea euen in one and the same Meridian, (and therefore much more in diuers) the Moones parallaxes in longitude, doe not happen in one and the same moment of time, neither are of one and the same magnitude, but in some places they happen sooner, in some places later. In some places they be greater, and in some places they be lesse, the reconciling of which differēces, especiallie in places of diuers Meridians, and latitudes, breedeth much combrance and difficultie euen to the skilfull Mathemat. in seeking the longitudes without ecclipses. But by this taking of two places vnder the Equinoctial or vnder the same parallel, all sensible difference that may happen in 12. houres and an halfe, either in the time, or in the magnitudes of the parallaxes, with all incombrances and impediments following the same, are sufficiently auoided. Whereby it is euident, that at all times (fit for obseruation) whensoever the Moone may be seene in the meridian of the place of obseruation, (which doubtlesse is verie often, so that a ship need not stay long in any port for the same) so often the longitude of that place may be found, especially if the giuen places haue great difference of longitude.

But in this worke great regard must be had, that the instruments which are vsed for the same, bee apt and large, and verie good, and with great diligence and exactnes managed.

And

And if the longitude of some few places, were either thus, or rather by Ecclipses found, as of Ternate, Iapon, Macao, Bantam, or Malacca, Goa, Aden, Mozambique, Cape de bona Esperanza, Cap. Verde, Fernambuco, the straits of Magellan, Panama, California, Virginea, Cap. Rasó, Tercera, Bergen in Norway, Colmogro, Moscua, Astracan, and Tripoli in Syria, &c. which might easilie be done either by the Navigators resorting vnto them, or by other learned Christians inhabiting there, I beleecie that the worlds Geographie, and the Art of Nauigation, would thereby be much amended.

There is yet another way to find sometimes the longitude of such places as are vnder either of the Tropiques, or betweene them, as certainly as by Ecclipses, *viz.* In the very moment of time, when the Moone shall be seene in the Zenith, (for then she hath in the place of obseruation, no parallax of longitude) or very neere vnto the Zenith, (and the better, she being neere vnto either of the Tropiques, and in the meridian) find out by one obseruation, the houre and minute of time, and by another obseruation at the same moment, find (by the staffe) the distance between the Centre of the Moone, & some notable fixed Star in, or neere vnto the Eccliptique. Then secondly, gather by the magnitude of the Moons diurnal motion, *secundū successum signorum*, (which you may find by the *Ephemerides*, for that day,) the houre and minute of time of her last, or next coniunction with the same fixed Starre. Thirdly, by the helpe of the same time of coniunction, collect also by supputation, the

the houre and minute of time wherein the Moone shall be next, or was last, in the point of σ , or ϕ or other aspect with the Sunne, (all which serue for that place of obseruation, wherein the Moone was seene in the Zenith.) And fourthly, compare this time of σ , or ϕ , or other aspect so found, with the time of the σ , or ϕ , or other aspect which you shall find in the *Ephemerides* for that day also, and belongeth vnto the Radical place of the said *Ephemerides*, and the difference of those two times in houres and minutes, will giue the difference of longitude, betweene the place where the obseruation is made, and the Radical place of the *Ephemerides*, very sufficiently.

Thus, I hope, I haue shewed sufficient reason, why I thinke the longitude may bee found, by celestiall obseruation, without respect of any Eclipse. And therefore also haue cleared my selfe from the Gentlemans imputation in this behalfe, and withall giuen you some hope of the certaintie of this my promised Complement; wherein some things stand vpon the obseruations, relations, and credible concurring testimonies of approved Authors, and generally receiued opinions; and these be of sufficient warrantize, untill they be disproued: And some things are from these former, concluded by Mathematicall Demonstrations, which seldome faile. And therefore these humors of preiudication may perceiue, that it is better, and more commendable, to forbear (at least for a time) to extenuate or depraue the reputations of men, for affirming the possibilitie of such things, as they the

said humors haue yet neuer scene, much lesse examined; then otherwise.

Some will maruell, and some will mislike that I should take this course for the publishing of these my Newes. To these I answere, that diuers reasons do necessarily require the same at my hands.

First it is needfull that there should bee some publique notice giuen thereof, whereby it may be publicquely knowne, as Innes haue their signes, and Taucerns their Iuies. It is an old saying and holden true :

Scire tuum nihil est, nisi te scire, hoc sciat alter.

Secondly, I held it necessarie to be published at the first in this manner, to preuent the practises of many euill disposed men, which vse with all celerity to impart vnto strangers, they care not whom, (so they may gaine a few pence thereby,) yea and to transport into other countries, whatsoeuer cometh into their hands, euen the food and clothing of their poore neighbours, without remorse or compassion : yea and the secrets of their countries estate, without respect; being thereby guiltie of no lesse crime then prodicion, if they do the same without the allowance of the supreme Magistrate. *Mali ciues, mali homines*, and like enough one day to heare,

*Vendidit hic auro patriam, Dominumq; potentem
Imposuit, leges fixit pretio, atque refixit.*

And so doubtlesse will do with this my Complement, if it shall come into their power, by reason whereof, our neighbour nations shall know the vse thereof, as soone as your selues, and wil no doubt

doubt (as much as in them lieth) preuent you of the honor and benefit thereof. Whereas my desire is, that our nation may haue the first fruits of the same.

And also I resolued of this manner of publishing hereof, to reserue vnto my selfe, as the only Author of the said Complement (next and immediately after God) the credit and estimation thereof, if it shall happen to find any. For many there be, that will forget, not only to giue vnto others their due, but contrariwise, will subtract from others their right; and not contented so, will arrogate the same vnto themselves, or deriue it vnto others. Into which foule fault, I feare me, *Iodocus Hondius*, a man otherwise well deseruing of Geographie, is likely one day to fall, ouer head and eares; hauing in times past, waded so far into that puddle; as appeareth, first, by the Inuectiue of *M. Edward Wright*, against him the said *Iodocus Hondius*, published in the Preface of his booke of the errors of Navigation, printed at *London*, 1599.

And secondly, by the great quarter Maps of the said *Iod. Hondius*, printed at *Amsterdam*, anno 1602. in which Maps he hath translated the discouerie of the *Vaygatz*, (made by our English, and first, by *Stephen Burrowes*, anno 1556. vnder the commission of King *Philip* and Queene *Marie*, bearing that date. And againe the second time, by *Arthur Pet*, anno Dom. 1583. vnder the commission of Queene *Elizabeth* of famous memorie, bearing that date. By which Discoueries, it might iustly haue been inserted into their Maps, by the name of *fretum*

Reg. Anglia, &c.) from the Imperiall crowne of *England*, vnto the house of *Nassau*, intituling it, *Fretum Nassonicum*; whereas, that otherwise truly noble house of *Nassau*, neuer did any thing for the first discovering of the same. This fault is great, and doubtlesse offensive vnto our whole nation, if it consider thereof. I could wish him, in good friendship, to be better aduised hereafter, of falling into the like excesse.

Lesse by much is the oversight (in that kind,) committed by that learned *Petrus Plantius*, who in his generall Map published in *London*, *anno Dom.* 1595. & vnder the Imperiall Armes of the crowne of *England*, neere vnto *Quinira* vpon the Western shore of *America* in his said Mappe, hath left out *Noua Albion*, without making any mention of the same, smothering thereby as much as in him lay, first the renowne of that worthie *Sir Francis Drake* Knight, who first discovered the same, *anno Dom.* 1578. besides whom, neuer any man hath sailed further that way, for any thing that is publicly knowne; and secondly, empayring in that point, for his power, the memorie of that worthie action of our nation, and the extent of the Imperiall crowne of *England*, vnto whose right, the said *Drake* took possession of that countrie, as lawfully he might do, not finding there, the Banners, or Ensignes of any Christian Prince, nor the said country in the possession or occupation of any Christian people, as he the said *Plantius* right well knew.

This omission of his therefore, in this case, is
worthie

worthie of blame; but yet he did not transport the same, by word, or by writing, vnto the King of *Spaine*, or vnto any other Prince, or Potentate, as *Ied. Hondius* hath done the other.

And of this kind of derogators, and arrigators, and transporting kind of men, there wanteth no store at any time, in euery Common-wealth. Of which kind of men, I my poore selfe in mine own particular, haue in times past received wrong, vnwilling any more to endure the like; or else with griefe, to reclaime my losses, by the way of challenge; as in old time did the Poet *Virgil*, vpon the Court gates of *Augustus Caesar*, his verses, with these verses.

Hos ego versiculos feci, salutis alter honores:

Sic vos non vobis.

Sic vos non vobis.

Further, because these newes are generall, and doe concerne all the subiects of this Imperiall Crowne of great *Britaine*, I supposed that if I should haue dedicated the same to any special person, I should thereby haue given iust offence vnto many vertuous minds, in cutting off from them al occasion to helpe forward the finishing of this my concluded complement; and therefore I haue reason to publish these my Conclusions after this fashion.

Lastlie, seeing it is not likelie (for many reasons as my case now standeth) that I shall be able, during my life, to make vp this my complement into a volume for record, I thought it best in this sort to make it known, to the end that you, for your parts,

might without any trauell or expenses, sufficiently consider of the thing it selfe, and also of the vse and benefit thereof, and so take occasion to entertaine, or reiect the same. And that I, for my part, might discharge my conscience towards God in thankfulness, and towards his Church, especially my Countrie, and your selues, in loue and seruice.

Thus therefore hauing finished my Nauigation, and being returned from *Cataia*, and arriued at home, I will there rest for this time, and (omitting all other narrations, and exhortations) leaue you to the Apostles rule, Rom. 14. 5. *Vnusquisque abundet suo sensu*: Euery one of you (in this behalfe) to doe so, as his owne wisdom shall thinke it best. And so with my dutie vnto you, and euerie one of you respectiue performed, I bid you heartily *Farewell*. From my studie in *Worth* this 24. Nouemb. 1608.



Yours *Antho. Linton*.

The Authors farewel to his Epistle.

*Vade liber tenuis, dignos Exquire patronos,
Nec pudeat titulos fronte tulisse meos.*

Britannia magna ad Authorem:
Progeniem suam.

*Christi Euangelium populo impartire palanti,
Gratum opus, & quo nil maius dicatur; at extra
Quid Lintone paras? magnarum nuncia rerum?
Res fac perficias, & eris mihi gratus Alumnus.*

FINIS.

